



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,977	08/26/2003	Akihiro Yanagita	65,017-185	6714

43935 7590 11/16/2007
FRASER CLEMENS MARTIN & MILLER LLC
28366 KENSINGTON LANE
PERRYSBURG, OH 43551

EXAMINER

CHEN, BRET P

ART UNIT	PAPER NUMBER
----------	--------------

1792

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/16/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

miller@fraser-ip.com
sloan@fraser-ip.com
crooks@fraser-ip.com

Office Action Summary	Application No. 10/649,977	Applicant(s) YANAGITA ET AL.	
	Examiner B. Chen	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24 and 26-44 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 19-24, 26-44 are pending in this application. Newly added claims 26-44 and canceled claims 1-18, 25 are noted. It is noted that newly added claims 26-44 are the same as claims 1-18, 25 without the reference characters.

The amendment dated 8/27/07 has been entered and carefully considered. The examiner appreciates the amendments to the specification and claims. In view of said amendments, the objection to the title and the claim objection have been withdrawn.

Claims 19-24 have been withdrawn from consideration as being directed to a nonelected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 26-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 26, the phrase “determining a theoretical value” is deemed nonenabling as the specification does not provide any guidance as to how one does this. It is noted that the theoretical value as presently recited can be anything. As a result, determining a theoretical value appears to be irrelevant. For example, one skilled in the art can assign a value of 1 or 10 or

100 or 1000. Are all values acceptable? It is not the examiner's intention to be condescending about this issue but wishes merely to have the applicant's limitation clarified. The same issue applies to claim 44.

In claim 26, the phrase "determining a first new value for the compensation factor" is deemed nonenabling as to how one skilled in the art would determine a new compensation factor. For example, if the initial value were 100, how does the skilled artisan decide on the new value? Could it be 10 or 1000? If it can be any value, what is the purpose of determining the initial value? The same issue applies to determining a second value. Again, as stated above, it is not the examiner's intention to be belligerent about this issue. The same issue applies to claim 44. Clarification and appropriate amendments are requested.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, the phrase "measuring a pressure of the viscous material" is deemed vague and indefinite as to what said phrase means. The examiner understands how one can measure the temperature of a material. But how does one measure the pressure of a material and is it different from the pressure of the system? Clarification is requested.

In claim 26, the phrase "determining a theoretical value" is deemed vague and indefinite. It is noted that the theoretical value as presently recited can be anything. If the applicant

intended for this, applicant should say so on the record and this rejection will be withdrawn. If not, however, any guidance as to what this theoretical value is should be incorporated in the claim. The same issue applies to claim 44.

In claim 26, the phrase "determining a first new value for the compensation factor" is deemed vague and indefinite as to what said phrase means. How does one determine a new value? Clarification is requested. The same issue applies to claim 44.

In claim 33, the phrase "establishing a cracking pressure" is deemed vague and indefinite as to what said term means. It is not clear what the cracking pressure has to do with the dispensation of the viscous material. The same issue applies to "establishing a linearity factor" in claim 34.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 26-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putt (6,329,013). Putt discloses a method for dispensing a viscous solution by utilizing a dynamic flow control system which consists of a dosing system controlled by means of a computer unit and consists of at least one pressure part, a material container, a nozzle, and a pressure member displaceable in the material container (col.1 lines 5-12). In one embodiment, a test sequence is run before the dispensing operation and during the test sequence data is collected mainly about the dosing unit including the pressure within at least one pressure part, the position of the pressure member of the dosing unit, and a material feed pressure by the computer unit, a set value is determined for a material feed pressure and a material flow substantially with regard to the collected data and the material is dispensed with regard to the set value for flow controlled by means of a regulator, as a direct value of the set flow value and at the same time the application flow is controlled (col.3 lines 33-45). It should be noted that Putt specifically teaches of determining a set value for a material feed pressure and a material flow substantially in respect of collected data and applying the material with regard to the set value by controlling the dispensed flow (lines 35-40). Also, the computer unit can measure the volume of the dosing unit from a sensor and regulate the pressure with the pressure member (lines 40-45). The control unit 15 is arranged with a number of inputs and outputs, for collecting data as well as for generation and transmitting control signals and may be controlled by the robot or another external control unit (col.4 lines 25-42) and controls a regulator 16 utilized to control the material flow (col.4 lines 43-61). The reference teaches the use of a pulse transducer (col.4 lines 5-19). However, the reference fails to specifically teach a compensation factor.

It is noted that the reference clearly teaches of measuring a value and comparing it with a set value and modifying a deposition parameter as a result and repeating. One skilled in the art would realize that the claimed compensation factor is merely what the computer would be assigned a value and results in an additional step with a more precise way of obtaining a specific parameter. It would have been obvious to utilize a compensation factor with the expectation of obtaining a more precise process of dispensing a material.

The limitations of claims 27-44 have been addressed above.

Response to Arguments

Applicant's arguments filed 8/27/07 have been fully considered but they are not persuasive.

Applicant first argues that Putt teaches a doser to detect material flow while the applicants use a flow meter to do the same (p.14).

The examiner agrees in part. It is first noted that nowhere in independent claim 26 is there any mention of flow meters. Hence, applicant's arguments are not commensurate in scope with the instant claims as presently written. Regardless, Putt specifically discloses that when materials to be dispense are very viscous, measuring flow with conventional flow meters is very difficult (col.2 lines 5-14). Putt has found a way to measure flow of a very viscous material without the use of a flow meter. It is the examiner's position that as the reference still fairly teaches of controlling flow by measuring flow rate and adjusting accordingly.

Applicant next argues that instantaneous flow rate is the same as theoretical dispensing rate (p.15 paragraph 1) and thus differs from Putt.

The examiner disagrees. A theoretical rate can never be the actual flow rate except in one instant. For example, the theoretical flow rate of a water fountain can be 3 inches - 10 inches per second. But unless one measures it, how can one skilled in the art actually know?

Applicant next argues that the applicant does not requires a test sequence as the prior art does (p.15 paragraph 2).

The examiner disagrees in theory. The use of a test sequence as disclosed by Putt is no difference from a theoretical flow and then making adjustments as disclosed by the applicant.

Applicant's arguments have been considered but are not deemed persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number:
10/649,977
Art Unit: 1792

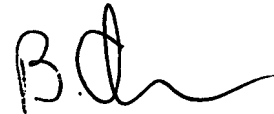
Page 8

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Chen whose telephone number is (571) 272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bc
11/12/07

A handwritten signature in black ink, appearing to read 'B. Chen', with a stylized flourish extending to the right.

BRET CHEN
PRIMARY EXAMINER